UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,241	01/14/2002	Matthias Bratz	42044 Cont.	1890
NOVAK DRUCE DELUCA + QUIGG LLP 1300 EYE STREET NW			EXAMINER	
			QAZI, SABIHA NAIM	
	SUITE 1000 WEST TOWER WASHINGTON, DC 20005		ART UNIT	PAPER NUMBER
			1612	
			MAIL DATE	DELIVERY MODE
			02/12/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)		
	10/043,241	BRATZ ET AL.		
Office Action Summary	Examiner	Art Unit		
	Sabiha Qazi	1612		
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION (36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status				
Responsive to communication(s) filed on 21 C This action is FINAL . 2b) ☐ This Since this application is in condition for alloware closed in accordance with the practice under B	s action is non-final. nce except for formal matters, pro			
Disposition of Claims				
4) ☐ Claim(s) 10-17, 19, 20 and 22-31 is/are pending 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 10-17,19,20 and 22-31 is/are rejected 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers	wn from consideration.			
9)☐ The specification is objected to by the Examine	er.			
10) The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct and the oath or declaration is objected to by the Expression of the correct and the oath or declaration is objected to by the Expression of the correct and the oath or declaration is objected to by the Expression of the oath or declaration is objected to by the Expression of the oath or declaration is objected to by the Expression of the oath or declaration is objected to by the Expression of the oath or declaration is objected to by the Expression of the oath or declaration is objected to by the Expression of the oath or declaration is objected to by the Expression of the oath or declaration is objected to by the Expression of the oath or declaration is objected to by the Expression of the oath or declaration is objected to by the Expression of the oath or declaration is objected to by the Expression of the oath or declaration is objected to by the Expression of the oath or declaration of the oath of	drawing(s) be held in abeyance. See tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate		

Application/Control Number: 10/043,241 Page 2

Art Unit: 1612

Non-Final Office Action

Claims 10-17 and 19-31 are pending. New claims 24-31 are added. No claim is allowed. Amendments are entered. .

Summary of this Office Action dated Wednesday, December 24, 2008

- 1. Continued Examination Under 37 CFR 1.114
- 2. Information Disclosure Statement
- 3. Copending Applications
- 4. Specification
- 5. 35 USC § 112 --- First Paragraph Written description Rejection
- 6. 35 USC § 112 --- First Paragraph Scope of Enablement Rejection
- 7. 35 USC § 103(a) Rejection
- 8. Response to Remarks
- 9. Communication

Application/Control Number: 10/043,241 Page 3

Art Unit: 1612

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/30/2008 has been entered.

Information Disclosure Statement

The references cited in the specification are not listed in IDS. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered. Incase of foreign patents applicant should provide English abstract and/or the translation of the document to be considered.

Copending Applications

Applicants must bring to the attention of the examiner, information within their knowledge as to other copending United States applications and or Patents, which are "material to patentability" of the application in question. MPEP 2001.06(b). See DAYCO Products Inc. v. Total Containment Inc., 66 USPQ2d 1801 (CA FC 2003).

Specification

Amendments in specification are not entered. Upon further review it was found out that the several amendments filed in specification. The one filed on 1/14/02 contains serial number 09/341,524. Amendments in the specification filed on 2/27/04, 5/24/04, 6/15/07 and4/30/08 are considered. Examiner requests the clarification of all the amendments in the specification, underlining the changes in a copy of specification and to submit a clean copy of the current specification. Applicant must include the description why and where the amendments were made. Too many amendments with unclear record are not acceptable.

The specification must not contain new matter. The changes in specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. An accompanying clean version (without markings) and a statement that the substitute specification contains no new matter must also be supplied.

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

35 USC § 112 --- First Paragraph Written Description Rejection

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and

shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 2. Claims 10-17 and 19-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
- 3. Claim 10 part c) proviso is new matter. It is negative limitation.
- 4. In claim 31"consisting essentially of "is new matter. The term "consisting essentially" in the specification never specifically disclosed the term, and never contemplated the exclusion of particular ingredients as implied therein.
- 5. In claim 31 "at least" is new matter.
- 6. Claims 24-31 contain particle sizes and percentages is new matter.
- 7. Amendments filed on 4/30/08 are new matter.

Applicant at the time of filing the application had no possession of all the claimed subject matter.

The written description requirement prevents applications from using the amendment process to update the disclosure in their disclosures (claims or specification) during the pendency before the patent office. Otherwise applicants could add new matter to their disclosures and date them back to their original filing

date, thus defeating an accurate accounting of the priority of the invention. See 35 USC 132. The function of description requirement is to ensure that the inventor had possession, as of filing date of the application relied on, the specific subject matter claimed by him.

See Genetech, 108 F 3d 1361, 1365 (Fed. Cir. at 1366, 78, 1999).

The test for determining compliance with the written description requirement is whether the disclosure of the application as originally filed reasonably conveys to one skilled in the art that the inventor had the possession at the time of the later claimed subject matter, rather than the presence or absence of literal support in the specification for the claimed language. See In re Kaslow, 707 F 2d 1366, 1375 (Fed. Cir. 1983).

Claims are broad and the description requirement of the patent statute requires a description of an invention, not an indication of a result that one might achieve if one made that invention. See, e.g., <u>In re Wilder</u>, 22 USPQ 369, 372-3 (Fed. Cir. 1984). (Holding that a claim was not adequately described because the specification did 'little more than outline goals appellants hope the claimed invention achieves and the problems the invention will hopefully ameliorate.')

A chemical genus can be adequately described if the disclosure presents a sufficient number of representative species that encompass the genus. *If the genus has substantial variance, the disclosure must describe a sufficient number of species to reflect the variation within that genus.* See MPEP 2163.

Here, the specification does not provide a reasonably representative disclosure of solid sulfonylurea mixture as claimed, a potentially huge genus inclusive of many different compounds having widely divergent structures and functions. Specifically, the specification discloses only one species metsulfuron methyl in Example 16 on page 32 and these are not viewed as being reasonably representative of the genus in its claimed scope because no readily apparent combination of identifying characteristics is provided, other than the disclosure of those specific species as examples of the claimed genus.

In the present case Applicant has no possession of method of the subject matter at the time the application was filed. Applicant is kindly requested explain this issue.

35 USC § 112 - First Paragraph Scope Enablement Rejection

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 10-17 and 19-31 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a solid sulfonylurea herbicide which is **metsulfuron methyl in Example 16 on page 32 of the specification**, does not reasonably provide enablement for a solid mixture of *all* sulfonylurea herbicides as claimed. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

To be enabling, the specification of the patent must teach those skilled in the art how to make and use <u>the full scope</u> of the claimed invention without undue experimentation. <u>In re Wright</u>, 999 F.2d 1557, 1561 (Fed. Cir. 1993). Explaining what is meant by "undue experimentation," the Federal Circuit has stated:

The test is not merely quantitative, since a considerable amount of experimentation is permissible, if it is merely routine, or if the specification in question provides a reasonable amount of guidance with respect to the direction in which the experimentation should

proceed to enable the determination of how to practice a desired embodiment of the claimed invention. <u>PPG v. Guardian</u>, 75 F.3d 1558, 1564 (Fed. Cir. 1996).¹

Factors to be considered in determining whether a disclosure meets the enablement requirement of 35 U.S.C. 112, first paragraph, have been described in In re Colianni, 195 USPQ 150, 153 (CCPA 1977), have been clarified by the Board of Patent Appeals and Interferences in Ex parte Forman, 230 USPQ 546 (BPAI 1986), and are summarized in In re Wands (858 F2d 731, 737, 8 USPQ2d 1400, 1404 (Fed Cir. 1988). Among these factors are: (1) the nature of the invention; (2) the state of the prior art; (3) the relative skill of those in the art; (4) the predictability or unpredictability of the art; (5) the breadth of the claims; (6) the amount of direction or guidance presented; (7) the presence or absence of working examples; and (8) the quantity of experimentation necessary.

When the above factors are weighed, it is the examiner's position that one skilled in the art could not practice the invention without undue experimentation.

Presently claimed invention is drawn to:

Claim 10 is drawn to a solid mixture comprising a) a sulfonylurea herbicide,

b) an alkylpolyglycoside, and

c) optionally one or more further active compounds, with the proviso that said further active compound (c) is different from aminophosphoric acids.

¹ As pointed out by the court in <u>In re Angstadt</u>, 537 F.2d 498 at 504 (CCPA 1976), the key word is "undue", not

Application/Control Number: 10/043,241 Page 11

Art Unit: 1612

A solid mixture comprising a) a sulfonylurea herbicide and

b) an alkylpolyglycoside (claim 10). The term "sulfonylurea" (for example, see the Formula in claim 11 where Z is nitrogen or carbon also includes thousands of compounds. Similarly see the Formula in claim 22, where J can be different heterocyclic and non-heterocyclic groups), polyalkylglycoside and one or more active compound is very broad and contains hundreds of thousand of compounds.

- (1) The nature of the invention: The claims are drawn to a solid mixture comprising a sulfonylurea herbicide, an alkylpolyglycoside and one or more active compounds which includes all the known and unknown sulfonylurea herbicides.
- (2) The predictability or unpredictability of the art: Because of the known unpredictability of the art, and in the absence of experimental evidence, no one skilled in the art would accept the assertion that the instantly claimed agents could be predictably used for controlling undesirable plant growth by using solid mixtures as inferred by the claim and contemplated by the specification.

 Accordingly, the instant claims do not comply with the enablement requirement of \$112, since to practice the claimed invention in its "full scope" a person of ordinary skill in the art would have to engage in undue experimentation, with no

[&]quot;experimentation".

There is lack of predictability in the in the art. Claims are broad and are drawn to any sulfonylurea herbicide (claim 10), which encompasses thousands of compounds for example, see the Formula in claim 11 where Z is nitrogen or carbon. Similarly see the Formula in claim 22, where J can be different heterocyclic and non-hetrocyclic groups. All of these compounds encompass thousands and thousands of compounds. The specification does not have the support for such a wide variety of compositions and methods of the compounds. See KENJI HIRAI (Herbicide Classes in Development, mode of actions, targets, genetic engineering and chemistry, Springer, See the entire document especially Table 1 on page 181, Figs 1-6 on page 187-192). Structural modification of sulfonylureas with nitrogen-containing heterocycles such as pyrrole and pyrrozole rings is shown chronologically in Figure 5, which includes pyrazosulfuron-ethyl Various type of sulfonylureas with five membered and halosulfuron-methyl. heteorcycles are shown in Fig. 4, such as thifensulfuron. Other sulfonylureas possessing benzyl, sulfonynamido, aniline and phenoxy groups are depicted in Fig. 6. Prediction to make any mixture or to predict any property for such a large number of compounds having different chemical structure and different properties is impossible as can be seen in the cited reference.

Application/Control Number: 10/043,241 Page 13

Art Unit: 1612

Metsulfuron methyl (Applicants exemplified compound)

Primisulfuron

Applicant's own specification discloses in amendments filed on 1/14/2002 that sulfonylureas of the formula III (equivalent to the formula when J=J1) are known, for example, from EP-A388,873, EP-A 559,814, EP-A 291 851 and EP-A 446 743 which includes large number of compounds.

(3) The amount of direction or guidance presented: There is no guidance

in the disclosure on how to make use the invention successfully with *all* sulfonylurea herbicides, polyalkylglycosides, just metsulfuron-methyl (example 16).

In re Dreshfield, 110 F.2d 235, 45 USPQ 36 (CCPA 1940), gives this general rule: "It is well settled that in cases involving chemicals and chemical compounds, which differ radically in their properties it must appear in an applicant's specification either by the enumeration of a sufficient number of the members of a group or by other appropriate language, that the chemicals or chemical combinations included in the claims are capable of accomplishing the desired result."

The courts have further interpreted undue experimentation as requiring "ingenuity beyond that to be expected of one of ordinary skill in the art" (Fields v. Conover, 170 USPQ 276 (CCPA 1971)) or requiring an extended period of experimentation in the absence of sufficient direction or guidance (In re Colianni, 195 USPQ 150 (CCPA 1977)). Additionally, the courts have determined that "... where a statement is, on its face, contrary to generally accepted scientific principles", a rejection for failure to teach how to make and/or use is proper (In re Marzocchi, 169 USPQ 367 (CCPA 1971).

(5) The presence or absence of working examples: There are no working examples and/or data to support the invention as presently claimed with *all* sulfonylureas; there is only one example to support solid mixture of **metsulfuron-methyl**. The disclosure does not contain working examples to support solid mixture of <u>all</u> sulfonylurea herbicides and polyalkylglycosides when **only metsulfuron-methyl**, as claimed.

A disclosure should contain representative examples, which provide reasonable assurance to one skilled in the art that the compounds fall within the scope of a claim will possess the alleged activity. See In re Riat et al. (CCPA 1964) 327 F2d 685, 140 USPQ 471; In re Barr et al. (CCPA 1971) 444 F 2d 349, 151 USPQ 724.

It has been established by the Courts that a single species is seldom, if ever, sufficient to support a generic claim. *In re Shokal*, 242 F.2d 771, 113 U.S.P.Q. 283, 285 (C.C.P.A. 1957). See also, <u>In re Grimme</u>, 274 F.2d 949, 124 U.S.P.Q. 499, 501 (C.C.P.A. 1960) (the naming of a member of a genus or subgenus is not a proper basis for claiming the whole group).

Objective evidence of nonobviousness must be commensurate in scope with the scope of the claims. *In re Tiffin*, 171 USPQ 294. A showing limited to a single

species can hardly be considered probative of the invention's nonobviousness in view of the breadth of the claims.

(6) The quantity of experimentation necessary: Since there is no guidance and/or direction provided by the Applicants in the disclosure to support for a solid mixture containing *all* sulfonylurea herbicides, polyalkylglycosides as claimed, one skilled in the art at the time of invention would have to go through undue experimentation to make and/or use the presently claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject

matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

Application/Control Number: 10/043,241 Page 18

Art Unit: 1612

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claimed Invention

Amended claim 10 is drawn to a solid mixture comprising

- a) a sulfonylurea herbicide,
- b) an alkylpolyglycoside, and
- c) optionally one or more further compounds,

with the proviso that said further active compound (c) is differ-

ent from aminophosphoric acids.

Elected species

a) Metsulfuron methyl

b) Polyalkylglycosides which is compound AGR6202

and

c) Decamba

TRADE OR OTHER NAMES

Metambane, Dianat, Banfel, Banvel, Banvel CST, Banvel D, Banvel XG, Mediben.

Claims 10-17 and 19-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over KOCUR et al², DUPONT³ and MALIK et al⁴.

Determining the scope and contents of the prior art (MPEP § 2141.01)

DUPONT teaches that granules of sulfonylurea including the elected species. Escort, Oust, and Telar (all members of the sulfonylurea family of herbicides) and Escort (Escort is metaulfuron methyl which is the elected

² US Patent No. 5,258,358. Published November 2, 1993. See the entire document, especially Formula (I) in col. 1, lines 55-59 in col. 2, lines 29-35 in col. 3, Table 1 in col. 3 and 4, claims, and examples.

³ Dupont Escort®, Oust®, Telar® Product Information Bulletin, June 1996, 4 pages. See the entire document. Filed in Applicants' PTO-1449.

invention and the only exemplified sulfonylurea).in the form of dispersible granules are <u>stable</u> when stored in their original containers at normal temperatures. DUPONT teaches that sulfonylurea herbicides are very effective inhibitors of plant cell division and growth. They inhibit the activity of a key enzyme in plants (acetolactate synthase, or ALS) for plant cell growth.⁵ Furthermore,.⁶ DUPONT also teaches that, at pH 5 and pH 9, the hydrolysis half-life is stable.⁷

KOCUR et al teaches liquid herbicidal compositions comprising a compound of the Formula (I) and an alkyl polyglycoside and at least one surfactant. KOCUR et al teaches that the surfactants mentioned can be employed advantageously in combined formulations of I with other herbicidal active substances such as sulfonylureas like DPX-L-5300 (tribenuron), thiameturon-methyl, **metsulfuron-methyl (elected species)**, or nicosulfuron (Ishihara), where they can enhance the action of I.⁸

Ascertaining the differences between the prior art and the claims at issue, and resolving the level of ordinary skill in the pertinent art (MPEP § 2141.012)

⁴ US Statutory Invention Registration H224, published on March 3, 1987. See the entire document.

⁵ See second paragraph on page 1.

⁶ See "Stability" paragraph on page 1.

⁷ See "Hydrolysis Half-Life Table" on page 2.

Instant claims differ from DUPONT does not teach specifically polyalkylglycosides. KOCUR et al in that KOCUR teaches the combination compound of Formula I *with* alkylpolyglycosides and sulfonylureas in liquid form, whereas the instant claims are drawn to comprising a combination of alkylpolyglycosides and sulfunonylureas in solid form.

KOCUR teaches that various materials such as insecticides, insect repellents, fungicides, bactericides, herbicides, and plant growth regulators may formulated into various products for use on crops, for insect control, weed control and the like. Often, these products are applied as a dry powder or a granular material to the surface, which is desired to be treated. MALIK et al teaches a specific dispersing aid is often employed when the product is to be applied in a powder or dry form and yet a second different dispersing aid is required when the product is to be applied as a semi-solid or liquid composition. It would be advantageous to prepare a product comprising the active ingredient and to utilize a single dispersing agent without regard to whether the final use application of the product is in a liquid or solid formulation. Moreover, the desirability of using a single ingredient as a dispersing agent reduces the possibility for error given the

⁸ See lines 55-59 of col. 2,

number of chemicals, which must be compounded to prepare a herbicide or insecticide product. 10 MALIK et al specifically mentions the usefulness of alkyl polyglycosides. 11

MALIK et al teaches the lower Degree of Polymerization (DP), lower alkyl chain-length materials tend to be rather water insoluble and thus are excellent for incorporation in powdered or polverant products whereas the higher DP material are valuable in that they have substantial emulsification capacity to function as a dispersing agent in the present invention.

The reference further teaches that generally, as the number of carbon atoms aglycone portion of the molecule increases the product becomes less soluble, thereby holding the active ingredient on plant surface.

Prima facie Obviousness and motivation (MPEP § 2142 to 2143)

It would have been obvious to one skilled in the art at the time the invention prepare a solid composition containing sulfonylurea filed to was alkylpolyglycosides because first DUPONT teaches solid granules of elected and exemplified sulfonylurea and teaches the advantages of being excellent herbicides

⁹ See lines 11-17 of col. 1.

¹⁰ See lines 29-41 of col. 1.

and are known to be stable in solid form second, alkypolyglycosides are known to be excellent surfactant and also can be in the solid form such as granule. Third, that since both the compounds is known to exist in solid form therefore it would have been obvious to prepare a solid composition containing sulfonylurea and alkylpolyglycoside.

One skilled in the art would have been motivated at the time of invention to prepare any solid composition of any herbicides such as sulfonylureas and alkyl polyglycosides because the prior art of MALIK et al and DUPONT teach these compositions, their uses, and their process of making. The solid composition has been taught by the prior art. Therefore, one skilled in the art who needs to prepare a solid composition of herbicide sulfonylurea and polyglycosides would be able to make and/or use it because the prior art teaches such compositions and their uses. One skilled in the art would have been motivated at the time of invention to make the composition of alkylpolycloside and sulfonylurea herbicides as presently claimed because the KOCUR et al teaches the effective and advantageous combination of alkylglycosides and sulfonylurea herbicides and glufosinate. The instant invention is drawn to the same combination minus glufosinate, but the term "comprising" allows additional ingredients to be added. Also, the motivation is

¹¹ See lines 34-37 of col. 2.

provided by KOCUR because it teaches the combined formulations sulfonylureas and polyalkylglycosides are storage-stable, undergo virtually no chemical changes, and are simple to handle.¹²

The transitional term "comprising", which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. See, e.g., >Invitrogen Corp. v. Biocrest Mfg., L.P., 327 F.3d 1364, 1368, 66 USPQ2d 1631, 1634 (Fed. Cir. 2003) ("Comprising" is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim.); Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261, 229 USPQ 805 (Fed. Cir. 1986); In re Baxter, 656 F.2d 679, 686, 210 USPQ 795, 803 (CCPA 1981); Ex parte Davis, 80 USPQ 448, 450 (Bd. App. 1948) ("comprising" leaves "the claim open for the inclusion of unspecified ingredients even in major amounts").

KOCUR et al teaches that the combined formulations containing sulfonylureas and polyalkylglycosides are **storage-stable**, **undergo virtually no**

¹² See lines 29-31 in col. 3.

chemical changes, and are simple to handle.¹³ DUPONT teaches that dispersible granule is more stable.

See KSR Supreme Court of United States Decision (Decided April 30, 2007, KSR INTERNATIONAL CO. v. TELEFLEX INC. et al. No. 04-1350) where it states that "However, the issue is not whether a person skilled in the art had the motivation to combine the electronic control with an adjustable pedal assembly, but whether a person skilled in the art had the motivation to attach the electronic control to the support bracket of pedal assembly". In the present case the combination of alkylpolyglycoside and sulfonylurea in solid form as claimed would have been obvious to one skilled in the art at the time the invention was made because prior art teaches the combination of both the components as cited above.

In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

¹³ See lines 29-31 in col. 3.

Data in the Specification and response to Remarks

Rejection under 35 U.S.C. 101 is withdrawn because claims of US Patent 6,482,772 has been disclaimed.

. Applicant should disclose what prior art has been disclimed in claim 1 part c).

That data presented in table 3 on page 35 of the specification has fully considered but was not found persuasive. "One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references." In re Keller, 642 F.2d 413, 208 SPQ 871 (CCPA 1981); In re Merck & Co., Inc., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). See MPEP 2145.

KOCUR et al teaches that the combined formulations containing sulfonylureas and polyalkylglycosides are storage-stable, undergo virtually no chemical changes, and are simple to handle. Since KOCCUR et al teaches a liquid composition of sulfonylurea and alkylpolyglycoside and DUPONT teaches all three products Escort, Oust and Telar are formulated in dispersable granules stable solid sulfonylureas and MALIK et al teaches that alkypolyglycosides excellent

Application/Control Number: 10/043,241

Art Unit: 1612

surfactants and can be in solid form it would have been obvious combine sulfonylurea herbicide and alkylpolyglycoside in solid form and to get solid mixture.

The data in the specification has been considered y the Examiner. Applicant argue that

"As illustrated in applicants' Table 3 on page 35 of the application, formulations which comprise SU- 1 or metsulfuron-methyl and either Lutensol® ON 30, Lutensol® ON 80, Armolem® 557, or Pluronic® PE 6400 suffers a loss in active ingredient in the range from 87 to 52% of the start- mg level when stored for 2 weeks at 54°C.55).

It has been decided by the courts that "[w]hen a patent simply arranges old elements with each performing the same function it had been known to perform and yields no more than one would expect from such an arrangement, the combination is obvious". KSR v. Teleflex, 127 S,Ct. 1727, 1740 (2007)(quoting Sakraida v. A.G. Pro, 425 U.S. 273, 282 (1976)). "[W]hen the question is whether a patent claiming the combination of elements of prior art is obvious", the relevant question is "whether the improvement is more than the predictable use of prior art elements according to their established functions." (Id.). Addressing the issue of obviousness, the Supreme Court noted that the analysis under 35 USC 103 "need"

not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." KSR v. Teleflex, 127 S.Ct. 1727, 1741 (2007). The Court emphasized that "[a] person of ordinary skill is... a person of ordinary creativity, not an automaton." Id. at 1742.

Consistent with this reasoning, it would have obvious to have selected various combinations of various disclosed ingredients from within a prior art disclosure, to arrive compositions "yielding no more than one would expect from such an arrangement".

Where a valid case of <u>prima facie</u> obviousness has been established, the burden shifts to applicant to demonstrate that a claimed functional property is applicable to the claim in its broad scope: <u>In re Greenfield</u>, 197 USPQ 227, 229 (CCPA 1978). (Holding that despite the fact that the rejection was one of obviousness and not anticipation, the burden was nevertheless on applicant to provide factual verification of the alleged functional property). Thus, even assuming *arguendo* that applicant has shown that a specific combination of the sulfonylureas and polyalkylglycosides might exhibit unexpected ***, this has not been shown for the broad genus of *** currently claimed.

It is *prima facie* obvious to select a known material for incorporation into a composition, based on its recognized suitability for its intended use. See MPEP 2144.07. It is *prima facie* obvious to combine two compositions, each of which is taught by the prior art to be useful for same purpose, in order to form a third composition to be used for the very same purpose. The idea for combining them flows logically from their having been individually taught in the prior art. See MPEP 2144.06.

Response to Remarks

Applicant's election of species with traverse filed on 10/21/2008 is hereby acknowledged. Since claims are generic and broad election of species is considered proper and is made Final.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sabiha Qazi whose telephone number is (571) 272-0622. The examiner can normally be reached on any business day except Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Krass Frederick can be reached on (571) 272-0580. The

Application/Control Number: 10/043,241 Page 30

Art Unit: 1612

fax phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR

only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system,

contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you

would like assistance from a USPTO Customer Service Representative or access to

the automated information system, call 800-786-9199 (IN USA OR CANADA) or

571-272-1000.

/Sabiha Qazi/

Primary Examiner, Art Unit 1612

Application/Control Number: 10/043,241

Page 31

Art Unit: 1612